

First record of Réunion Black Petrel *Pseudobulweria aterrima* on Mauritius

by R. V. Tatayah, C. G. Jones, D. Birch & M. Salamolard

Received 18 April 2010

Réunion Black Petrel *Pseudobulweria aterrima* breeds on the island of Réunion in the south-west Indian Ocean, where its population is estimated at 45–400 pairs (average 250 breeding pairs), or a maximum of 1,000 birds at sea (Attié *et al.* 1997, Cheke & Hume 2008), making it one of the rarest seabirds in the world (Le Corre *et al.* 2003). Recent estimates indicate that the breeding population may be much lower than estimated, probably just a few dozen pairs (Riethmuller *et al.* in prep.). It is treated as Critically Endangered (BirdLife International 2009). A subfossil mandible was collected in cave deposits on Rodrigues, where the species perhaps nested in the past (Bourne 1968). *P. aterrima* is increasingly known as Mascarene Black Petrel (Attié *et al.* 1997, Le Corre *et al.* 2003), a name supported by its recorded presence on all three of the Mascarenes.

Although first collected and drawn for Commerson around 1770 (Cheke 2009), *P. aterrima* was not described until 1856 and ten had been collected by the end of the 19th century, of which only four survive (Jouanin 1970). No further sightings were made until 1970 (Hirschfeld 2008), by when the species was considered probably extinct and a reward had been offered for its rediscovery, which led to the capture of two grounded birds on Réunion in 1970 and 1973 (Jouanin 1987). A freshly dead bird was found in 1995 (Attié *et al.* 1997). To date, no nests have ever been found. However, calls of Réunion Black Petrel have been heard during the breeding season (the austral summer) on cliffs at 1,000 m (Riethmuller *et al.* 2003, Hirschfeld 2008) and fledglings have been caught in March.

Since 1995, a rehabilitation programme on Réunion cares for birds found stranded under coastal streetlights (Le Corre *et al.* 2002, 2003). Due to the Réunion-wide awareness and rescue campaign, seabirds are saved from probable death due to poaching, dehydration, starvation, predation by cats and dogs, and car strikes; the survivors are ringed prior to release. By 2008, 22 *P. aterrima* (including eight fledglings) had been rescued and 19 were subsequently released (Hirschfeld 2008).

On 30 September 2002, DB discovered a roadkill Réunion Black Petrel on the Plaine Champagne Road (Black River Gorges National Park), above the village of Chamarel under the only streetlight in the area (20°43'S, 57°42'E; 647 m). This is the first record of the species on Mauritius. The bird was in almost perfect condition and was sent to the Natural History Museum (Tring), where it was prepared as a study skin (BMNH 2004.5.1; Figs 1–3). It was an adult but the sex could not be determined (K. van Grouw *in litt.* 2004). Morphometrics are presented in Table 1.

Workers at a nearby hunting lodge are unfamiliar with the petrel. It is possible that Réunion Black Petrel nests in montane parts of the Black River Gorges, but this is unproven. The habitat is fairly similar to that of the suspected breeding areas on Réunion and non-breeding petrels are known

TABLE 1
Morphometric measurements of Réunion Black Petrel *Pseudobulweria aterrima* specimen from Mauritius (BMNH 2004.5.1).

Morphometric	Length ¹ mm
Wing (left/right)	255/256
Tail	110
Tarsus	41.6
Bill* (to feathers)	28.5
Middle toe	50.2

¹ mean of measurements taken by Anthony Cheke and Joanne Cooper.

* bill depth not measured as jaw broken

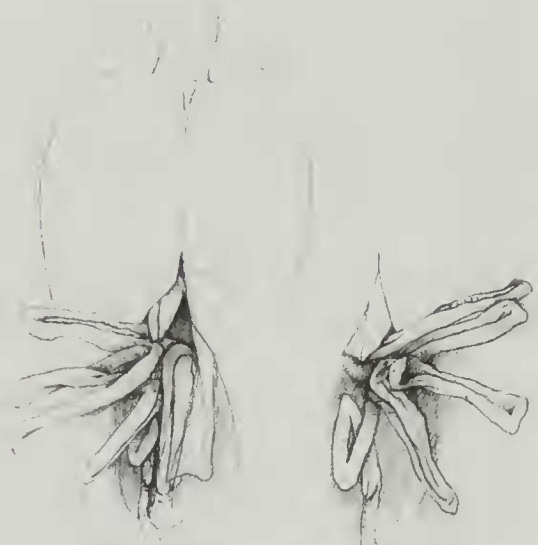


Figure 1 (left). Dorsal view of Réunion Black Petrel *Pseudobulweria aterrima* specimen (BMNH 2004.5.1) with spread wing (© Natural History Museum, Tring)

Figure 2 (below left). Ventral view of Réunion Black Petrel *Pseudobulweria aterrima* specimen (BMNH 2004.5.1) and spread wing (© Natural History Museum, Tring)

Figure 3 (above). Details of head of the Réunion Black Petrel *Pseudobulweria aterrima* (© Natural History Museum, Tring)

Figure 4 (below). Drawings of the intestines of the Reunion Black Petrel *Pseudobulweria aterrima*, displaced to left and right, showing the lack of intestinal coiling, typical of *Pseudobulweria* spp. (Katrina van Grouw, © Natural History Museum, Tring)



Pseudobulweria aterrima 2004.5.1 intestines displaced to right & left sides

to prospect other breeding sites, despite their philopatric behaviour. *P. aterrima* presumably returns to its nest sites nocturnally to reduce chances of predation. However, shearwaters have become extinct on Mauritius due to the presence of Indian Lesser Mongooses *Herpestes javanicus*, and it is probable that petrels must have become very rare. Alternatively, the bird could have been a vagrant, as in Barau's Petrel *Pterodroma baraui* for instance.

In 1888 Edward Newton, former Colonial Secretary in Mauritius and brother of Alfred Newton, then curator of the Cambridge Zoology Museum made a request to Auguste Lantz, curator of the Muséum de Saint-Denis, Réunion, to obtain Réunion Black Petrels for his collection. Auguste de Villèle, thought to have been the only person to know their nest sites, collected eight individuals in 1889–90 (Jouanin 1970). Six were retained by the museum in Saint-Denis (accession records noted by Jouanin 1970). Unfortunately these specimens have been lost, but two specimens from the series survive (Jouanin 1970, Attié *et al.* 1997), in the Museum National d'Histoire Naturelle, Paris, and the University Museum of Zoology, Cambridge, UK.

Acknowledgements

We thank staff of the Société d'Études Ornithologiques de La Réunion for valuable information on the species and the rehabilitation programme on Réunion. Robert Prÿs-Jones (Tring) and his colleagues Katrina van Grouw and Joanne Cooper provided morphometric and other information for the Mauritius specimen. Anthony Cheke transported the specimen to Tring and provided additional morphometrics. We also thank the referees, Anthony Cheke and Vincent Bretagnolle, for their invaluable comments.

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- Addresses: R. V. Tatayah, Mauritian Wildlife Foundation, Grannum Road, Vacoas, Mauritius, e-mail: vtatayah@mauritian-wildlife.org. C. G. Jones, Durrell Wildlife Conservation Trust, Les Augrès Manor, Trinity, Jersey JE3 5BP, Channel Islands, UK, & Mauritian Wildlife Foundation, Grannum Road, Vacoas, Mauritius, e-mail: carlgjones@btinternet.com. D. Birch, Flat 3 Clockhouse, St. Mary Street, Nether Stowey, Somerset, TA5 1LJ, UK, e-mail: birchdarryl@hotmail.com. M. Salamolard, Parc National de la Réunion, 112 rue Sainte-Marie, 97400 Saint-Denis, La Réunion, France, e-mail: marc.salamolard@reunion-parcnational.fr